

# Increase Recycling Working Group Meeting

October 27, 2020 1-3pm

## Increase Recycling Working Group



Welcome & Introductions, Co-chairs:

Laura Francis, First Selectman, Town of Durham Ben Florsheim, Mayor, City of Middletown

DEEP Support Team: Sherill Baldwin, Chelsey Hahn, Elly Moore

## **CCSMM**

## https://portal.ct.gov/DEEP-CCSMM



- Connecticut is looking to the future of waste reduction and sustainable materials management. DEEP and many municipalities from across the state are joining together to form the Connecticut Coalition for Sustainable Materials Management (CCSMM) and explore ways to reduce the amount of waste that is generated in our state, improve reuse, recycling, organics collection, and other innovative solutions.
- CCSMM is looking to the future to find preferred ways to reduce and manage the amount of waste produced in Connecticut that provide system reliability, environmental sustainable, and fiscal predictability. A full list of the participating jurisdictions is included at the end of this page, and will be updated as more jurisdictions sign on over time.

# Welcome: Housekeeping



- Meeting is in webinar format, automatically muting all attendees that are not panelists.
- This meeting is being recorded.
- Non-municipal participants: Please share your ideas and comments will be accepted through "chat" or,
- Anyone/everyone encouraged to provide feedback to: DEEP.RecyclingProgram@ct.gov

# Increase Recycling Working Group Future Meeting Dates



- Monday, November 9: 10:00 12:00pm
- Monday, November 23: 1:00-3:00pm
- Monday, December 7: 1:00-3:00pm

Registration information on Increase Recycling Working Group webpage

https://portal.ct.gov/DEEP/Waste-Management-and-Disposal/CCSMM/Increased-recycling

## Increase Recycling Working Group



- Focus of Presentations/Discussion:
  - Existing Systems/ what's working, needs improvement?
  - Resources for municipalities
  - OHow can local groups help?
  - Necessary system improvements (diversion of problematic materials, creation of convenient local collection areas for recyclables)
  - Municipal Resources: "boxed-up" solutions that are convenient, no or low cost)

# **Boxed Up:** Textiles



#### Benefits

- Textiles represent about 7.4% of CT MSW, representing 101,413 tons annually (2015).
- Some companies pay, avg .05-.15 cents per pound\*, these companies also provide you with weight of textiles collected.

#### Costs

- Collecting textiles has no to little cost to set up.
- Most companies will 'drop' a collection container at your municipal transfer station, fire department, school or other town property at no cost.
- Some offer curbside collection programs.

#### Resources

- CT DEEP webpage: <u>Textiles Reuse and Recycling</u>, includes how to set up a collection program, what happens to clothes after collected and Dept. of Consumer Protection safety and liability information.
- Also, archived webinar: Collecting Textiles for Reuse and Recycling

# Setting Up Textiles Collection in my Municipality, Business, or School

- The Northeast Recycling Council provides how-to steps and key questions to think about when developing a textiles collection program in the Collecting Textiles – Make it Work For Your Community Blog Part 1 and Part 2. NERC's blog also helps you calculate the approximate costs of disposing textiles in your community.
- SMART is an international trade association for mixed post-consumer textile
  manufacturers, graders, sorters, and recyclers, and has developed resources for
  educators and municipalities for promoting textile recovery including <u>Videos and</u>
  <u>PSAs</u>, a <u>Media Kit</u>, <u>Infographic Banners</u>, and a <u>model ordinance</u>.
- Check out <u>Connecticut's Donation Bin Law</u> (CGS Section 21a-430) and SMART's <u>Collection Bin Operator Code of Conduct</u> video for suggestions on how to regulate collection bins in your community.

Source: CT DEEP Textile Reuse and Recycling webpage: https://portal.ct.gov/DEEP/Reduce-Reuse-Recycle/Textiles-Reuse--Recycling

# Municipal Recycling Resource Center: Archived E-News and Webinars



Collecting Textiles for Reuse and Recycling

February 25, 2019

Speakers: Sherill Baldwin, CT DEEP

Brian Bartram, Salisbury-Sharon Transfer Station

Julie DesChamps, Greenwich Recycling Advisory Board

Brooks Parker, Town of Manchester

# Boxed Up: Swap Shops (aka Take It or Leave it Sheds)



#### Benefits

- Swap shops allow community members the opportunity to give gently used, clean and safe materials a new home.
- Reusing items cuts down on the amount of waste requiring disposal and can extend the useful lives of many items.

#### Costs

- Establishing swap shops requires only the cost of the space and staffing.
- Municipalities can choose to set up swap shops at transfer stations, recycling centers, Public Works buildings, or other public locations.
- Towns can choose to charge for use of the shop/ dropping off materials.

#### Resources

- CT DEEP webpage: <u>ReUse Centers and Material Exchanges</u> lists local collection sites for donating and buying reusable goods.
- Northeast Recycling Council (NERC) Reuse Explorer Guide describes how to design and implement safe and effective Reuse Sheds.

# Municipal Swap Shops

Many communities with solid waste or recycling transfer stations have Swap Shops, a barn, shed or other building where residents may take or leave useable household items. Swap Shops should be in a dedicated area, shed or building at the Transfer Station. They can become hubs for community activity.

When designing the space, it's important to consider the goals of the program and the needs of the community. Each community should think about items for collection in the shop, a layout plan and design for the structure, ongoing maintenance, staffing, hours of operation, liabilities, signage, promotion, and other management needs.

Source: CT DEEP ReUse Centers and Material Exchanges webpage <a href="https://portal.ct.gov/DEEP/Reduce-Reuse-Recycle/Material-Exchanges">https://portal.ct.gov/DEEP/Reduce-Reuse-Recycle/Material-Exchanges</a> & NERC's Reuse Explorer Guide <a href="https://nerc.org/documents/Reuse/Reuse/Reuse/20Explorer%20Guide">https://nerc.org/documents/Reuse/Re

# Boxed Up: CT WRAP – Plastic Film Collection

#### Benefits

- •Promoting this "Return to Retail" program helps reduce contamination in our mixed CT's mixed recycling program by providing a solution.
- Plastic film is more than bags while many focus on bags a CT WRAP audit found 30-50% of incoming film was not plastic bags.
- Trex offers a school challenge, which can be linked with community-wide collection of film winners receive a bench made from recycled plastic promoting the importance of using products with recycled content.



#### Costs

- •The plastic film/wrap program is a "return to retail" program; relying on participating retailers and residents to bring film back to stores.
- •To ensure residents are aware of the program relies on promotion —which could happen on municipal webpage, handouts, etc.
- •Towns could collect more film by offering plastic bag/film collection at transfer station, senior centers, schools, or community centers.

#### Resources

- Plastic Film Recycling <a href="https://www.plasticfilmrecycling.org/">https://www.plasticfilmrecycling.org/</a>
- •What to Do With...Plastic Bags and Film <a href="https://portal.ct.gov/DEEP/Waste-Management-and-Disposal/What-Do-I-Do-With#plasticbags">https://portal.ct.gov/DEEP/Waste-Management-and-Disposal/What-Do-I-Do-With#plasticbags</a>
- •CT WRAP Campaign Report (2017) <a href="https://www.plasticfilmrecycling.org/wp-content/uploads/2018/08/2017-CT-WRAP-Campaign-Report.pdf">https://www.plasticfilmrecycling.org/wp-content/uploads/2018/08/2017-CT-WRAP-Campaign-Report.pdf</a>
- •CT WRAP videos Partnering with local retailers; benefits for retailers <a href="https://www.youtube.com/playlist?list=LL">https://www.youtube.com/playlist?list=LL</a>

#### CT WRAP – Plastic Film Collection

Connecticut WRAP (Wrap Recycling Action Project) is an innovative public/private partnership that promotes recycling of plastic "film" beyond bags. The partnership is comprised of public officials, municipalities, recycling officials, retailers and grocers such as Price Chopper, plastics makers, Trex, which makes recycled plastic lumber products, and other recycling advocates.

Grocers and retailers accept plastic bags such as grocery bags, newspaper bags, produce bags, bread bags, dry cleaning bags, and even zipper bags for recycling. They also accept plastic wraps from water bottle cases, diapers, bathroom tissue, and paper towels, as well as bubble wrap and shipping pillows. The plastic bags and wraps must be clean and dry and placed in storefront recycling bins. Plastic bags and wraps get recycled into products such as new grocery bags, benches, and decking.

Residents can learn where and what to recycle at <a href="https://www.plasticfilmrecycling.org/">https://www.plasticfilmrecycling.org/</a>

Source: CT DEEP, Public Officials Launch Campaign to Recycle More Plastic Bags, Wraps

# Municipal Recycling Resource Center: Archived E-News and Webinars

#### CT WRAP: Trex Challenge, a school recycling project

September 25, 2017Facilitator: Sherill Baldwin, CT DEEP

Speakers: Stephanie Hicks, Trex

Jennifer Heaton-Jones, Housatonic Resources Recovery Authority

Cathy Praissman, Team Leader

Source: Archived Municipal Recycling Coordinator Webinars

https://portal.ct.gov/DEEP/Reduce-Reuse-Recycle/Municipal-Recycling-Resource-Center/Archived-Municipal-Recycling-Coordinators-E-News-and-Webinars

## Response to Public Comments

#### **CT Local Recycling Coordinators**

- Per town
- Regional approach
  - COGs vs. Authorities
  - Learning from others MA DEP
- How to fund

#### **Bottle Bill**

- Increase containers, incl. glass, liquor, nips
- Increase deposit
- Increase handling, supporting redemption centers



# Increase Recycling Working Group



Municipal support, regional approach

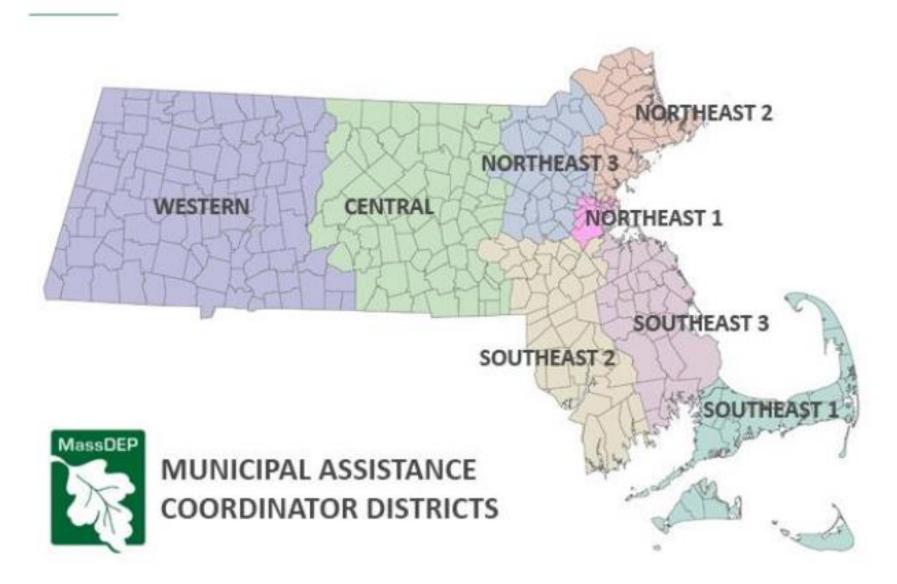
**Brooke Nash** 

**Branch Chief** 

Municipal Waste Reduction Program

**MassDEP** 

#### Map of MAC Districts



Source: <a href="https://www.mass.gov/guides/massdep-municipal-assistance-coordinators">https://www.mass.gov/guides/massdep-municipal-assistance-coordinators</a>

#### Apply for SMRP Municipal Technical Assistance

Your city or town may apply for up to 80 hours of help from a MassDEP Municipal Assistance Coordinator (MAC) for a single recycling/waste reduction project.



Beginning in January 2020, MassDEP will accept applications for MAC project assistance on a rolling basis.

Apply for Technical Assistance via Re-TRAC Connect™ →

#### CONTACT THE DETAILS Learn More About SMRP How to apply Technical Assistance Grants How to apply □ Online Next steps Online + **Questions about SMRP Technical** Contact Assistance? MassDEP Municipal Assistance Coordinators \* Next steps janice.pare@mass.gov + Questions about Re-TRAC What to Know Connect™? Your city or town may apply for up to 80 hours of help from a rachel.smith@mass.gov \* MassDEP Municipal Assistance Coordinator (MAC) for a single recycling or waste reduction project.

Source: https://www.mass.gov/how-to/apply-for-smrp-municipal-technical-assistance

### Increase Recycling Working Group

CCSMM

CT Coalition for Sustainable
Materials Management

Modernizing Bottle Bill

Jules Bailey, Chief Stewardship Officer Oregon Beverage Recycling Cooperative

Oregon's Bottle Bill: A Cooperative Approach

# Oregon's Bottle Bill: A Cooperative Approach

How the Private Sector Made Redemption and Recycling a Success

Jules Bailey
Chief Stewardship Officer
Oregon Beverage Recycling Cooperative









# Bottle Bill: A Brief History



#### A private system run by distributors



5¢ deposit Founded upon return to retail



2011

BottleDrop® Redemption Center introduced



2017

Increase to 10¢ deposit



OBRC created privately run



Reusable bottle planning begins



Expansion, huge increase in container volume

Reusable program launches





# The Power of a Dime

10¢ Sparks Huge Demand

Redemption rate went from 64% to over 82%

(now around 90%!)





# Efficiency in Numbers

The Oregon Beverage Recycling Cooperative operates with...

\$44m

operating budget (2019)

**2600** 

retail redemption locations (~450 total RVMs)

2 billion

containers/year recycled

Green bag drop sites (25 fullservice centers)

**200** 

members and participants

processing plants

employees throughout Oregon

Zero

taxpayer dollars

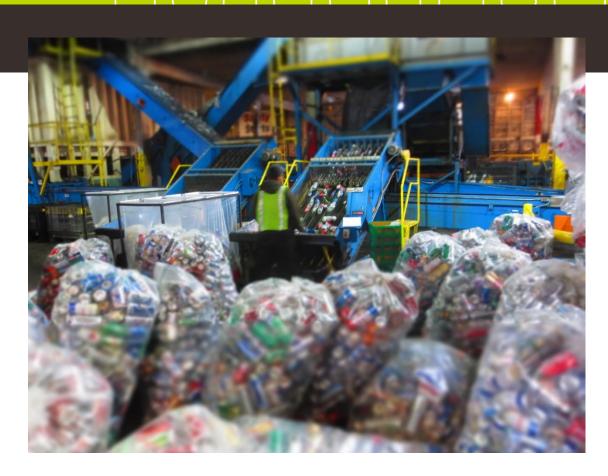




# Where Do the Deposits Go?

Customers get back every dime









# BottleDrop® Redemption Center

#### Clean, fast and easy returns

- Single-purpose, indoor facilities
- 25 full-service redemption centers
  - One currently under development
  - Possible because of return to retail requirement
- Largest center accepts approx. 100 million containers/year
- ZERO taxpayer dollars







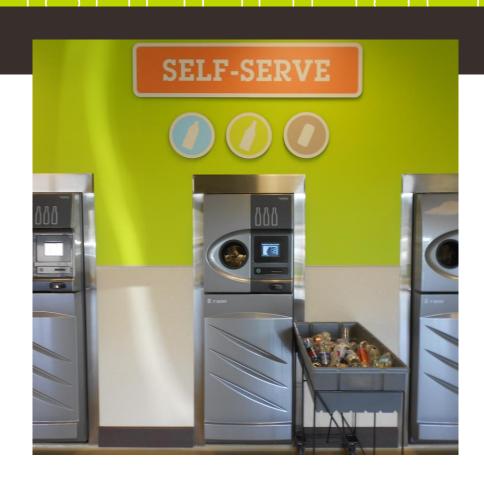




# High volume self-service

#### Majority of containers through RVMs

- Centers can have as many as 15 or more RVMs depending on volume
- Customers can redeem up to 350 container/person/day - more than at stores
- Cash dispensers on site allow for immediate refund access





# Green Bags

#### The easy self-serve account program

- Gear up. Customers enroll, get card and tags at kiosk, and buy bags at store
- Tag & fill it. Place coded BottleDrop tag on bags and fill with redeemable containers
- Drop it. Leave bag at secure drop door 62 locations statewide
- Track it. Check account balance online or with our mobile app



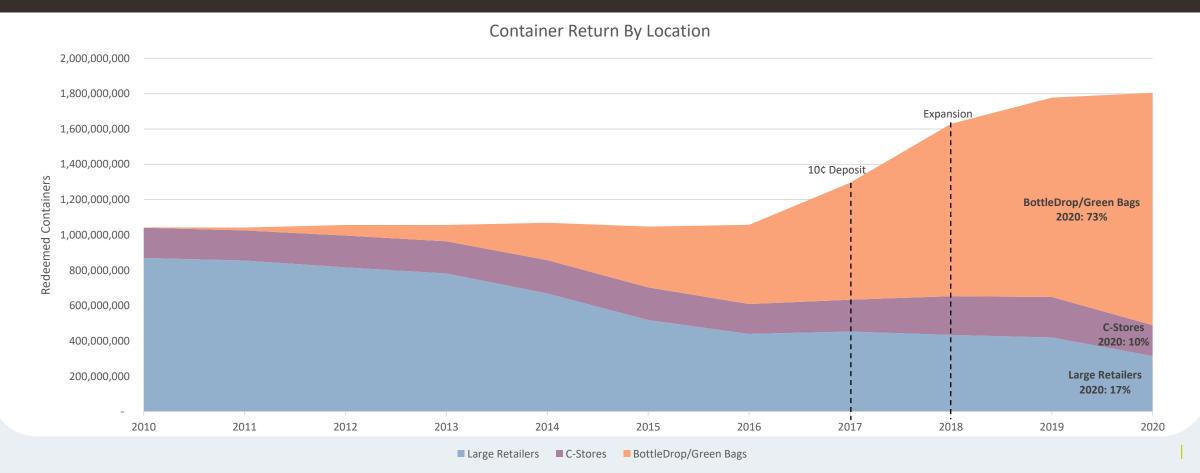






# BottleDrop now over 70% of volume

Returns have shifted quickly to a system customers prefer

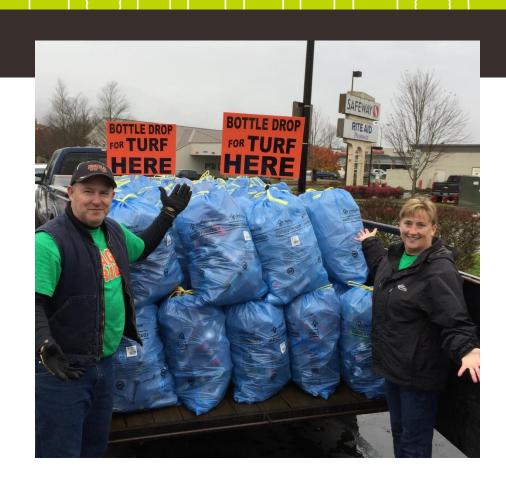




# Blue Bags

#### Redeem yourself, support your cause

- Non-profits:
  - Enroll as fundraisers
  - Distribute Blue Bags
  - Drop full bags at a BottleDrop
  - Collect a check
- Over \$1 million raised to date







# Express/Dealer Redemption

Expanding access throughout the state

- Smaller volume markets and urban areas
- Expanded access to green bag accounts and no fee for bag drops
- 37 locations operating

New locations coming every week













# Get Your Cash and Much More

Stewardship for the next generation

- At a BottleDrop
- At a store kiosk
- Get 20% more with rewards
- Donate to charity
- Save for college











# Measuring Success

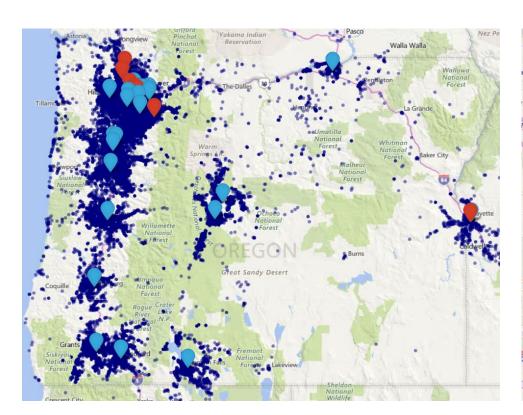
#### Creating a legacy for people who call Oregon home

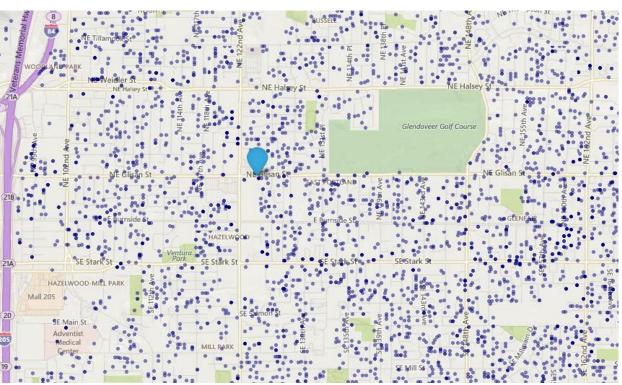
- Over half a million account holders
  - Up to 1000 account sign ups each day
  - Up to 30,000 bags processed per day
  - Green bag about 37% of overall volume
- 70%+ of all redemptions through BottleDrop
- 1000+ eligible non-profits in Give
- Over \$1.5 million donated to non-profits



# Measuring Success

Creating a legacy for people who call Oregon home



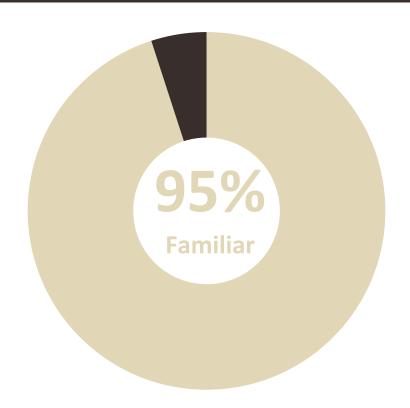


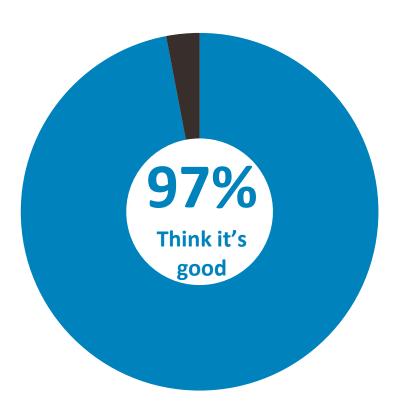
BottleDrop® OBRC

# Oregonians are familiar with the bottle deposit and return program.



And they agree that it is good

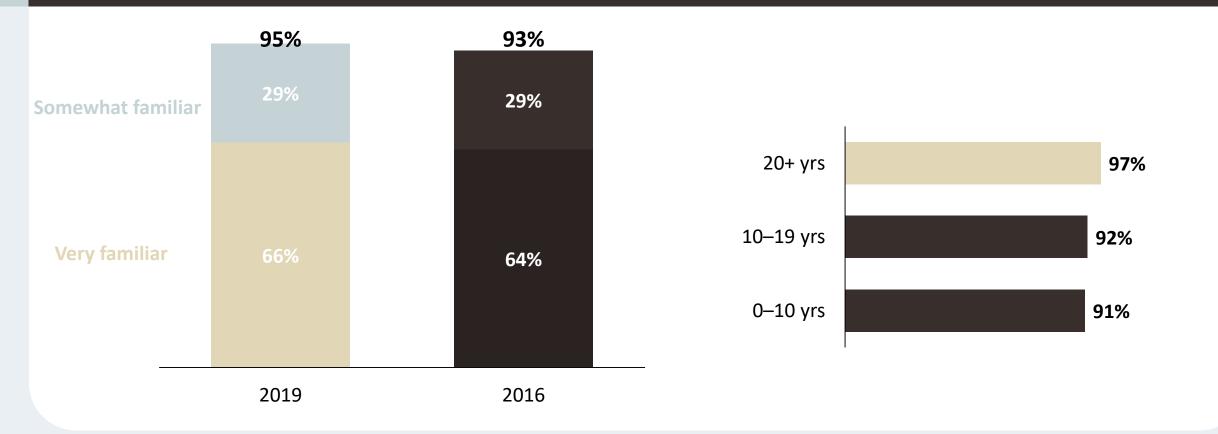




## Familiarity with the program has remained stable since 2016.

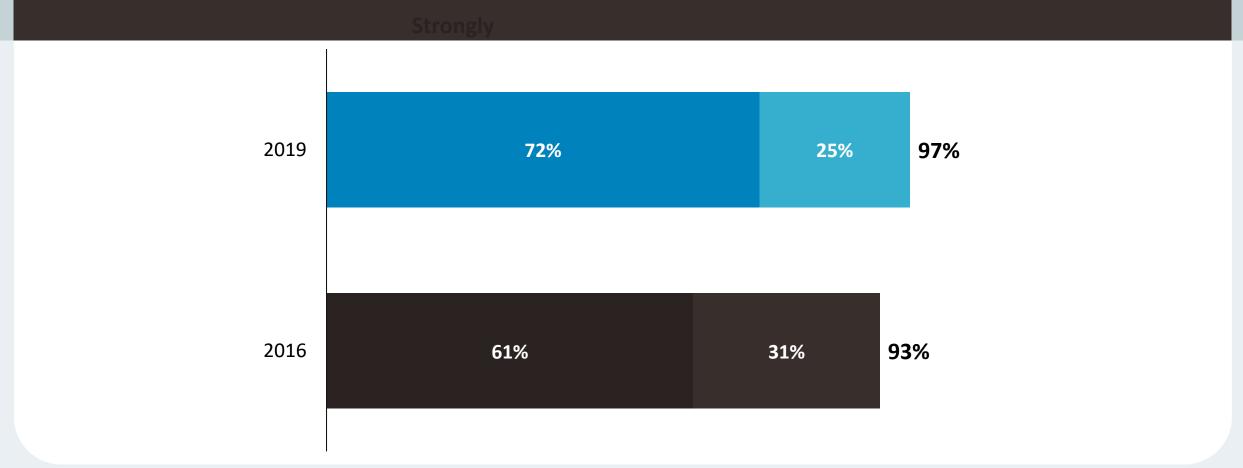


Long-term residents are slightly more familiar.

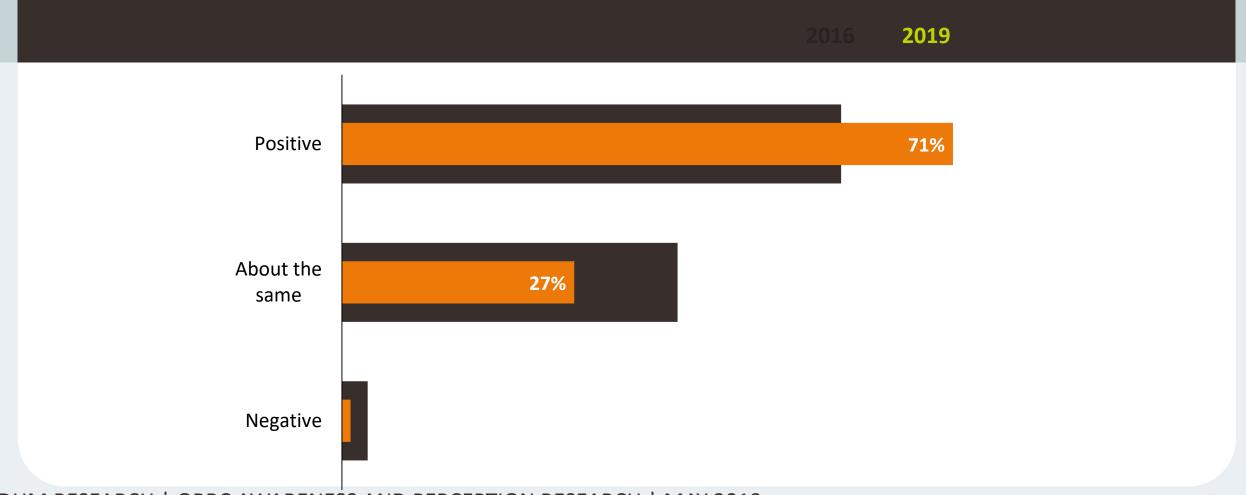


## Strong agreement that the program is good has increased \





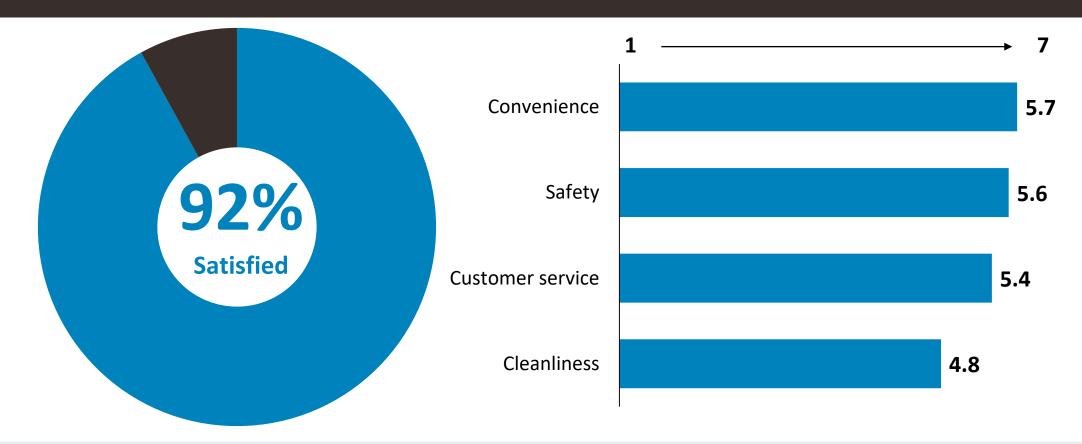
## Program viewed more positively knowing that it is privately-run by distributors.



## BottleDrop users are satisfied with BottleDrop George Company (1997) their experience



Most feel the centers are convenient and safe.







## Where Does the Material Go?

Keeping the cycle close

Plastic: 100% processed at ORPET facility located in St. Helens (~30 million lbs. of plastic last year)

Glass: 100% processed in Portland at O-I and made into new bottles (including refillables!)

**Aluminum:** 100% processed domestically











## Privately-run DRS is EPR



### Oregon program most efficient way to do EPR for containers

- Producers and distributors internalize all costs and benefits of the system, incentivizing efficiency and performance
  - Oregon has lowers cost per container in the world, with strong outcomes
- Enable supply chain links that benefit other environmental goals like minimum content standards
- No handling fees or other payments that increase cost
- Scrap retained by beverage industry
- Creates a centralized system with economies of scale that allow for innovations like refillable bottles







### Refillables/Reusables

Building on the infrastructure

12 participating breweries, cideries and wineries so far

Lower cost for producers

Fraction of the carbon footprint of even recycled glass

About 1 million units in first year

Projected 6 million units by year 3







## Quality is Everything

Clean, defect-free and sorted

- Inspection of every bottle post-wash
- Additional swab testing to ensure cleanliness
- OBRC takes responsibility and liability for cleanliness for any bottle defects before filling
- Bottle washing machines can easily handle foreign contaminants, like cigarettes, limes and even syringes

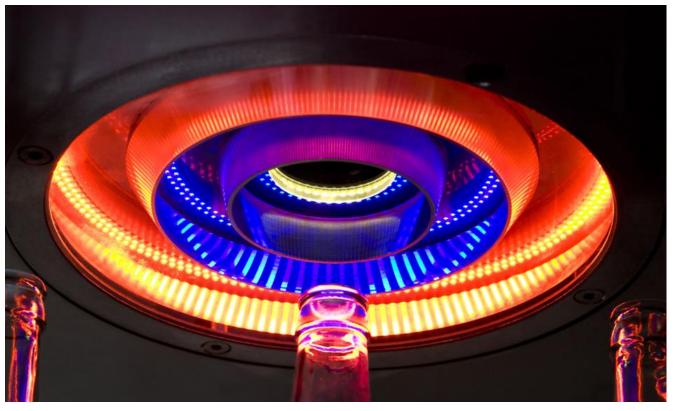


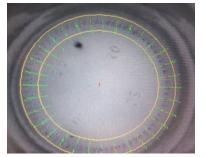


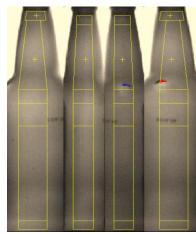


## Quality is Everything

Clean, defect-free and sorted







## BottleDrop® Oregon Redemption Center

## OBRC

## Refillables Participants

Off to a strong start with some of the Northwest's best



























# nank you.

Learn more at obrc.com and BottleDropCenters.com

**Jules Bailey** Chief Stewardship Officer Oregon Beverage Recycling Cooperative







Key Principles of High-Performing Deposit Return Systems

Michael Noel, Governmental Affairs Manager TOMRA



Key Principles of High-Performing Deposit Return Systems





## TOMRA has four decades of experience in deposit systems

## ACTIVE IN EVERY MAJOR GLOBAL DEPOSIT MARKET







**QUEBEC** 



**GERMANY** 



**NEW YORK** 



**MICHIGAN** 



**OREGON** 

+ 31 more markets

## 40 BILLION

cans and bottles collected annually

84,000

reverse vending machines installed globally

\$6.8 BILLION

in deposits exchanged annually



## We are active in every link of the deposit value chain



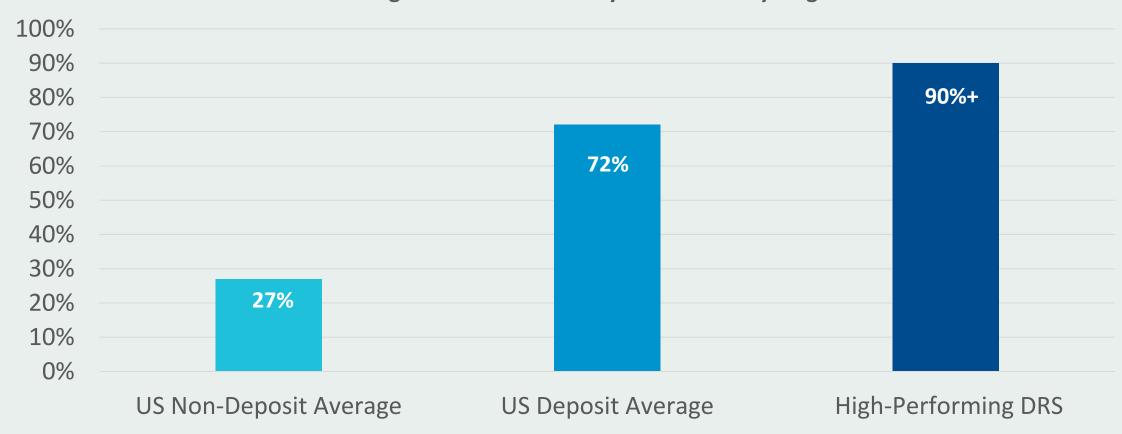


## Deposit systems are known for incentivizing recycling



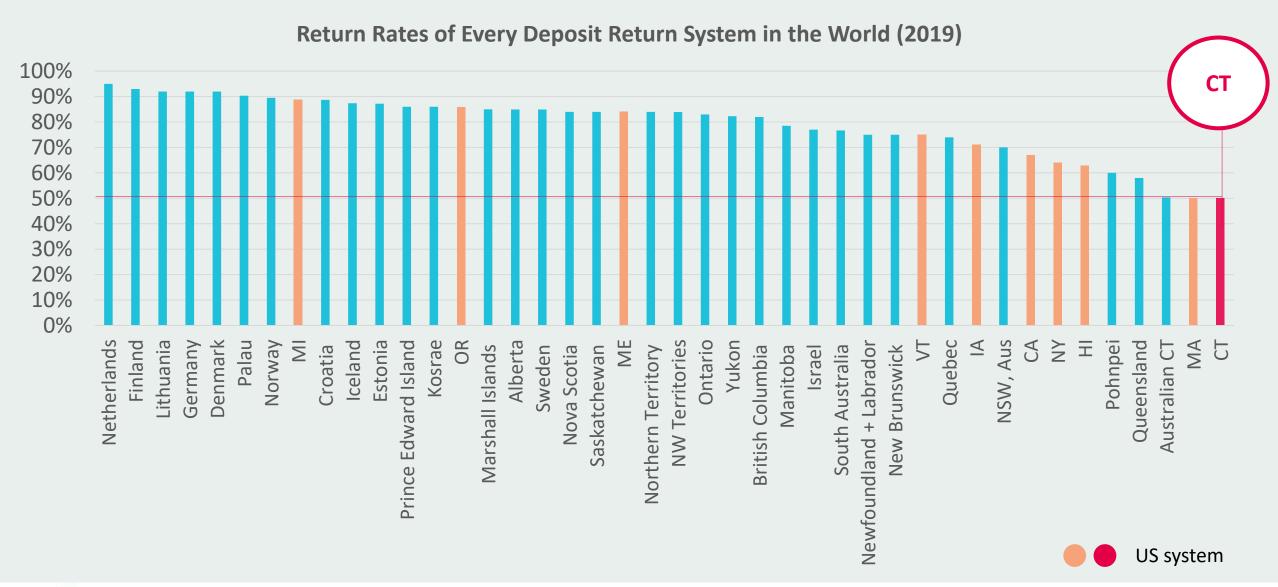
## Deposit systems are extremely effective at capturing items for recycling

#### **Beverage Container Recovery Rates for Recycling**





## Not all deposit systems are created equal





Why are some container deposit return systems succeeding while others are failing?

## What We've Learned: High-performing deposit return systems prioritize four principles

#### **PERFORMANCE**



A collection target for all beverages plus a meaningful deposit delivers strong results.

#### **CONVENIENCE**



The redemption system is easy, accessible and fair for all users.

#### PRODUCER RESPONSIBILITY



**Producers finance and invest in the system** using the unredeemed deposits and commodity revenues.

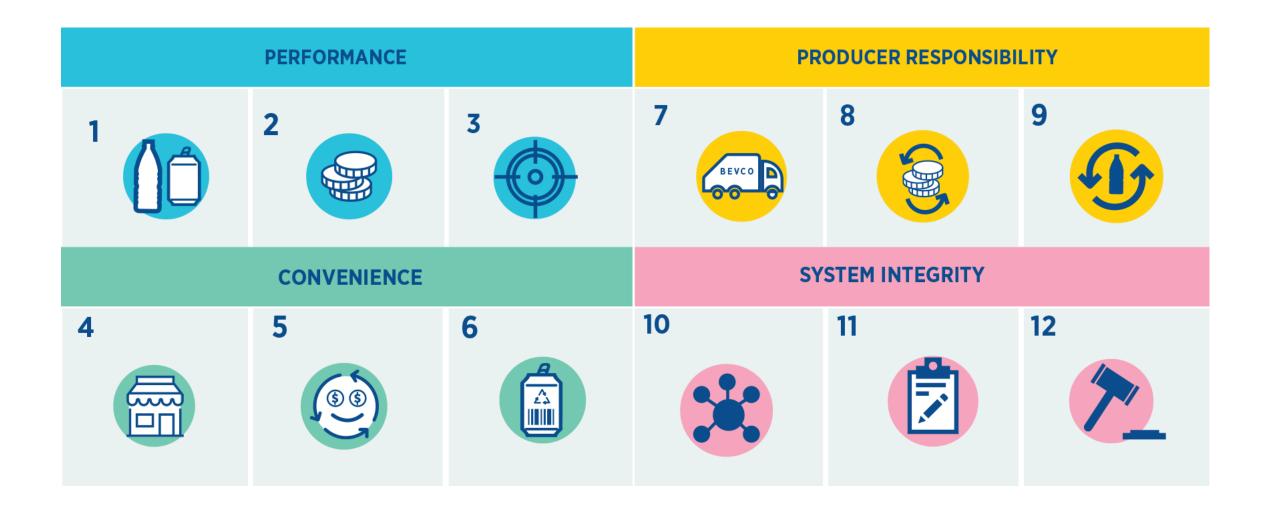
#### **SYSTEM INTEGRITY**



Trust is built into the system through transparent management, a data-driven clearinghouse, and innovative technology.



### These principles are brought to life through 12 Key Elements

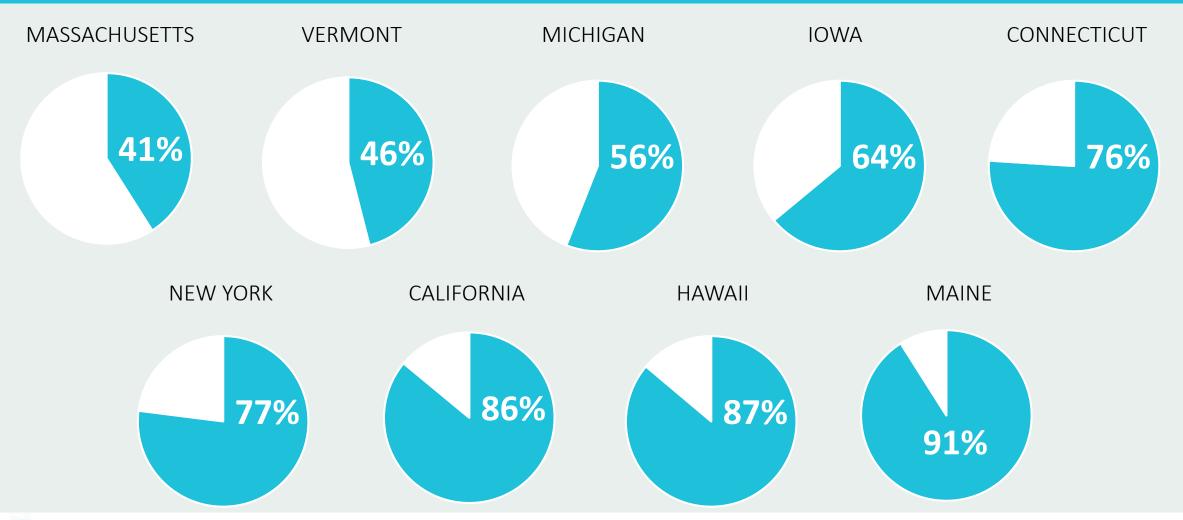






## Relevant scope of beverages and containers

#### PERCENT OF BEVERAGE UNITS COVERED BY DEPOSIT PROGRAM

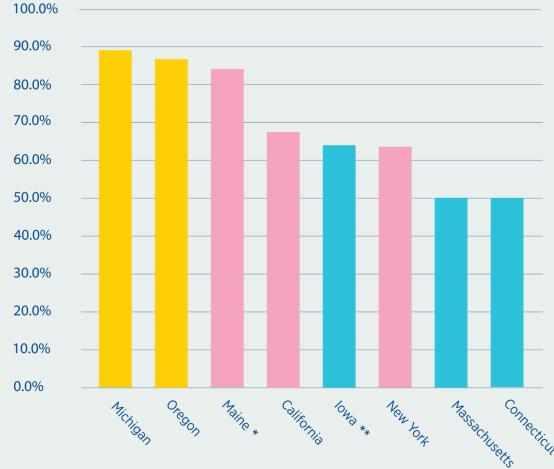




### Minimum deposit value



#### **U.S. Beverage Container Redemption Rates (2019)**



\*2017 estimate. \*\*2016 estimate. BottleBill.org. 2019.



## Convenient redemption system for consumers

## 8 out of 10

of the highest performing deposit return systems in the world are "return-to-retail" models

**NETHERLANDS** 

**FINLAND** 

**DENMARK** 

**GERMANY** 

LITHUANIA

**NORWAY** 

**CROATIA** 

**MICHIGAN** 





## Centralizing key responsibilities



The Role of a "Centralized System Manager"

#### Mission

Accomplish all targets at lowest possible costs for its stakeholders

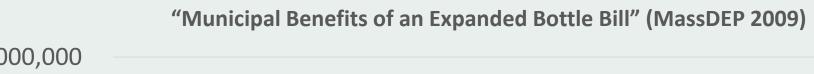
#### Owned and financed by

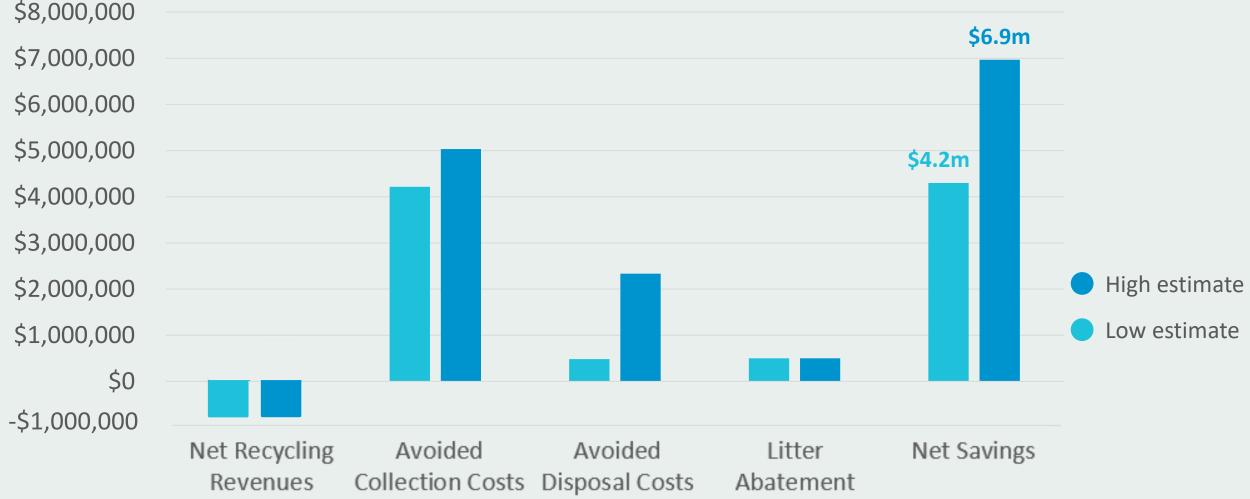
• Beverage producers and retailers

#### Potential Responsibilities

- Deposit clearing
- Product registration
- Fraud management
- Calculating EPR and/or handling fees
- Data management
- Commodity sales/distributions
- Material transportation
- Reporting and public education

### MassDEP evaluated impacts of an expanded bottle bill







## Further reading

Last updated: July 12, 2019



#### Deposit Return Systems

#### Factsheet: Economic Savings for Municipalities



In recent years, there has been renewed interest in deposit-return systems (DRSs) for the recovery of beverage containers. These systems place a small deposit on beverage purchases, which is refunded to the consumer when the empty container is returned for recycling.

As more countries consider DRS as a means to reduce litter and encourage recycling, many are questioning the impacts that such a system would have on municipalities, particularly those that have an existing source separation program in place. The main argument put forward by opponents is that DRSs harm municipalities by diverting recyclables with the most value from the municipal recycling stream, resulting in a reduction of the cost-effectiveness of municipal curbside programs. To support this argument, evidence is provided to show loss of material revenues as well as the industry contributions from extended producer responsibility schemes for packaging where they exist. However, one of the key elements missing in the majority of these analyses is the savings resulting from the reduced or avoided costs of collection, treatment, and disposal by the municipal waste management system.

We wanted to learn more about how municipalities are impacted by the implementation of a DRS, and so we set off on a task to compile all of the research done on the subject over the years. What we found was compelling, and sufficiently closes the case that container deposit systems are good—not bad—for municipalities. The following table presents a compilation of 32 studies that examined the costs and benefits to municipalities of implementing (or expanding) a DRS for beverage containers. It is noteworthy that, although different in scope,

"Factsheet: Economic Savings for Municipalities"

- Compiles 30+ studies on the impact of deposit systems on municipalities
- https://www.reloopplatform.org/resources/factsheets/



### Studies on job impacts of a modernized deposit system

Jobs Created by NY's Current Deposit System



Total Jobs Forecasted for a *Modernized*NY Deposit System





## Thank you!

Mike Noel, @MrMikeNoel

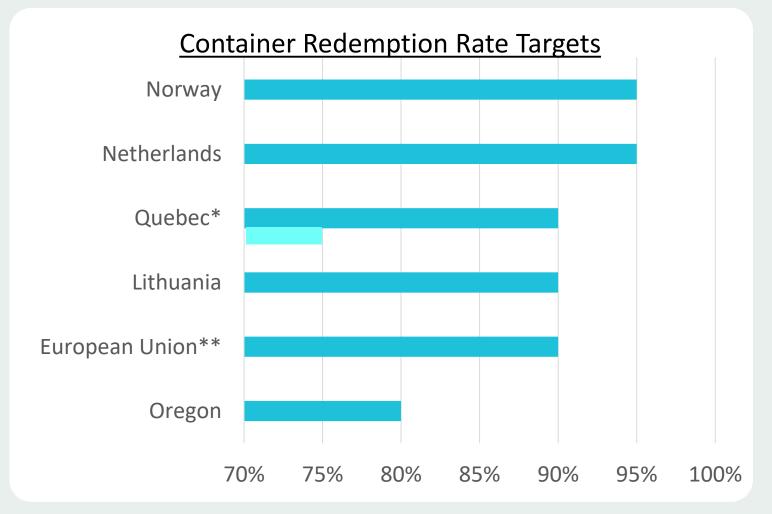


www.tomra.com



### Redemption Rate Target

When a 'redemption rate' is set in statute, stakeholders align their activities to achieve it.



<sup>\*</sup>Quebec set staggered goals of 75% collection by 2025, 90% 2030. \*\* EU set goals of 77% collection by 2025, 90% by 2029.





Comments/Discussion for municipal participants

• For non-municipal attendees, to submit comments and solutions, use the CHAT box or submit them through the public engagement request for comments and solutions or email:

DEEP.RecyclingProgram@ct.gov

CCSMM

CT Coalition for Sustainable
Materials Management

Materials to consider to achieve greater reuse/recycling:

Reuse: Textiles - BOXED

Furniture (swap shop? repair?)

Reuse markets/Municipal swap shops - BOXED

Electronics (reuse/repair) – TO BE BOXED

Recycling: Bottle Bill (liquor bottles, including nips) – OCT 27<sup>th</sup> Meeting

Plastic Film (WRAP program, other muni. collection areas) - BOXED

**Rigid Plastics** 

Scrap Metal

Electronics (collection of certain covered electronics\* thru CT's Electronic

Recycling Law; non-CED collection options)

Tires (EPR WG?)

Hazardous Waste (EPR WG?)

Food Scrap Collection at Transfer Stations – TO BE BOXED

<sup>\*</sup>incl desktop or personal computers, computer monitors, portable computers, CRT-based televisions and non-CRT-based televisions



Suggested topics for next meeting?

CCSMM

CT Coalition for Sustainable
Materials Management

- Suggested topics for next meeting?
  - Ban Single Use Plastics:
    - Learn about Stamford's expanded polystyrene ban
    - Learn about banning food service ware with PFAS
  - Repair or Donation:
    - Managing used furniture; appliances; repair clinics
  - How to improve existing infrastructure
    - Stay with a single stream?
    - Source Separation: Glass
    - Source Separation: Bulky Rigid Plastics
    - Multy-family Housing
    - Public Space Recycling
    - Municipal buildings, including schools
    - Site constraints at transfer stations; satellite collection locations
    - Regional/shared services
  - MSW/Recycling Contracts:
    - How can contracts support or inhibit waste reduction, reuse and recycling



- Next Steps
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